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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/516,337	03/01/2000	Lior Horwitz	42390.P7257	3761

7590

08/19/2003

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EXAMINER

TIEU, BINH KIEN

ART UNIT

PAPER NUMBER

2643

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/516,337

Applicant(s)

HORWITZ ET AL.

Examiner

BINH K. TIEU

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 1-20 are objected to because of the following informalities:

Each of the claims recited the acronym "PHY". Since "PHY" is not a well-known acronym, it is required to be spelled out as "physical" or "physical layer" in accordance to the specification, line 9 on page 2. Appropriate correction is required.

Claim 18 recited the term "MAC" is not also the well-known acronym. It is required to spell the "MAC" as "media access control". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1, 9-10, 17-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Citta (U.S. Pat. #: 4,190,862) in view of Parham (U.S. Pat. #: 4,159,448).

Regarding claims 1, 9, 17 and 20, Citta teaches a physical layer (PHY) or a receiver, as shown in figure 6, comprising:

a capacitor (i.e., capacitor 47);

a current source to charge the capacitor by conducting conduction current (i.e., current source 48); and

a transistor to discharge the capacitor for a discharge time interval by conducting a transistor conduction current, the transistor coupled to the capacitor so that the transistor conduction current decreases in magnitude as the capacitor discharge during the discharge time interval (i.e., transistor 43, col. 9, line 31 – col.10, line 21).

It should be noticed that Citta fails to clearly teach the difference of the first and second voltages. However, Parham teaches such feature in col.11, line 57 – col.12, line 27 for a purpose of detecting designated signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of such difference of the first and second voltages, as taught by Parham, into view of Citta, in order to detect amplitude or pulses in the input signal applied to the input terminal.

Regarding claim 10, Citta further teaches the pair of transistors 68 and 64 and a current source transistor 43 as shown in figure 6.

Regarding claim 18, Citta further teaches limitations of the claims in col.11, lines 14-31.

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5. Claims 2-8, 11-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Citta (U.S. Pat. #: 4,190,862) in view of Parham (U.S. Pat. #: 4,159,448) as applied to claims 1, 9, 17 and 20 above, and further in view of Li (U.S. Pat. #: 6,137,375).

Regarding claims 2-3, Citta and Parham, in combination, teaches all subject matters as claimed above, except or the transistor is an nMOSFET having a gate voltage responsive to the capacitor voltage difference. However, Li teaches such feature in col.9, line 21 – col.10, line 2 for a purpose of controlling the voltage in the loop circuit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of such nMOSFET having a gate voltage responsive to the capacitor voltage difference, as taught by Li, into view of Citta and Parham in order to discharge the capacitor.

Regarding claims 4-8, 11-16 and 19 Li further teaches limitations of the claims in col.7, line 59 - col.10, line 2.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Newman et al. (U.S. Pat. #: 6,600,344) and Havens et al. (U.S. Pat. #: 6,348,816) each teaches an envelope detector for detecting the envelope of a differential voltage signal. They are not applied to this Office Action because their filing date is **later** than the filing of the instant application.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (703) 305-3963 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (703) 305-4708 and **IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES.**

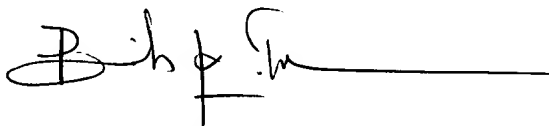
Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist, tel. No. 703-305-4700).

A handwritten signature in black ink, appearing to read 'Binh Tieu', with a long horizontal line extending to the right.

**BINH TIEU
PRIMARY EXAMINER**

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Date: August 11, 2003